Joint preparations

Table 7.1

No. and joint type		Sides	Method	Thickness
12. V-joint $\beta_1 = 45^{\circ}$ $\beta_2 = 15^{\circ}$ C = 1.0 - 2.0 mm D = 2.0 - 3.0 mm	β_1	One side	MMA FCW	4 – 16 mm
13. V-joint $\beta_1 = 45^{\circ}$ $\beta_2 = 15^{\circ}$ $C = 2.0 - 2.5 \text{ mm}$ $D = 2.0 - 2.5 \text{ mm}$	β_2	Two sides	MMA FCW	4 – 16 mm
14. V-joint $\beta_1 = 45^{\circ}$ $\beta_2 = 15^{\circ}$ C = 1.5 - 2.5 mm D = 4.0 - 6.0 mm	β_1 β_2	One side against backing	FCW	4 – 20 mm
15. X-joint $\alpha = 60^{\circ 3}$ C = 2.0 - 3.0 mm D = 2.0 - 2.5 mm		Two sides	MMA MIG TIG ⁶⁾ FCW	14 – 30 mm ⁸⁾
16. X-joint α = 80° C = 3.0 – 8.0 mm ⁴⁾ No root gap	a c	Two sides	SAW	14 – 30 mm

 $^{^{3)}}$ The joint angle for special grades is $60 - 70^{\circ}$.

⁴⁾ A root land of 5 mm and above may require the torch to be angled towards the direction of travel, see "Width and depth" in chapter 4.

⁶⁾ Normally only for the first 1 – 3 runs. Followed by MIG, FCW, MMA or SAW. ⁸⁾ A thickness above 20 mm can be prepared as an asymmetrical X-joint.